Examining the utility of the Connect with Pharmacy (CwP) intervention in reducing elderly readmission

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Topic

Substantial evidence demonstrates an increased risk of hospital admission when patients move between care providers. This is particularly pronounced in elderly populations who have complex needs. We investigated whether sharing discharge information would impact on hospital readmission rates in this sample.

Intervention

Leeds Teaching Hospitals Trust (LTHT) recently implemented a web-based intervention ("Connect with Pharmacy"; CwP) that allows hospital pharmacy staff to securely share pertinent discharge information with the patient's community pharmacy. To evaluate the efficacy of this intervention, data collected as part of routine clinical management were retrospectively analysed. For primary analysis, patient admission rates were tracked 6 months prior (baseline) and 6 months' post-referral. Secondary measures included change in total length of stay (LoS) if readmitted, duration of emergency department (ED) visits and polypharmacy.

Improvement

In the sample of patients (aged 65 years and older) tracked in the first 6 months of the intervention (n = 647; Mean age = 81 years, 389 female), admission rates following referral (M=1.1, SD=1.49) reduced relative to baseline (M=1.31, SD=1.36) (V=38766; $p < .001$). There was no reduction in total LoS (V = 63462, $p = .12$), but subsidiary analysis revealed a post-referral reduction in number of days spent in hospital lasting less than 3 days ($\chi 2 = 13.37$, $p < .001$). There were no statistically reliable differences for number of ED visits, hours spent in ED or on polypharmacy (all p's > .05).

Discussion

The CwP intervention has been successfully implemented at LTHT and admissions for patients referred were reduced by 21.2% during the intervention period. From finding a reduction in LoS post-intervention for short stays, there may also be further benefits for patient experience and hospital flow. Conducting economic cost-benefit analysis is the next step towards larger scale adoption.